

ABSTRACT

An integrated circuit including a vertical power component having a terminal formed by a chip substrate of a first conductivity type, a control circuit thereof, the control circuit isolated from the substrate by an isolation region of a second conductivity type, and a protection structure against polarity inversion of a substrate potential. The protection structure includes a first bipolar transistor with an emitter connected to said isolation region and a collector connected to a reference potential input of the integrated circuit, a bias circuit for biasing the first bipolar transistor in a reverse saturated mode when the substrate potential is higher than the reference potential, and a second bipolar transistor with an emitter connected to the substrate and a base coupled to the isolation region for coupling the isolation region to the substrate through a high-impedance when the substrate potential is lower than the reference potential.